

On the Teeth of the Black and Wood Shell Slugs.

By Dr. J. E. GRAY, F.R.S. &c.

Razoumowsky, in his Natural History of Jorat, and Sturm, in the German Fauna, separated the Black Shell-slug as a distinct species, the first under the name of *Limax ater*, and Sturm under that of *Limax cinereo-niger*. Férussac regarded it only as a black variety of *Limax cinereus*, and most authors, except Nilsson, have followed his example. Herr Otto Goldfuss, in a paper on the Land and Freshwater Mollusca of the Rhine Province and Westphalia, has proved, by the examination of the teeth, that the German Black Slug is quite distinct from the usual streaked *Limax cinereus*: the teeth in the latter are thick, conical, acute, and quite simple; while in the black species they are slender, subcylindrical, attenuated to a fine point, and have a strong denticulation or notch on the front side, at some distance below the tip.

I may further observe, that the teeth of *Limax sylvaticus*, which has been considered as a doubtful species, and which Férussac thought was a variety of *L. agrestis*, are, according to the same author, exceedingly unlike the teeth of any other European Slug. The upper process of the tooth in this species is short, cylindrical, truncated, and rounded at the tip; while in all the others it is tapering and acute.

It is desirable that the teeth of English specimens should be examined, to find if the same difference exists in those species natives of this country.

This is an example of what I have long believed,—that the teeth afford very good characters for the separation of allied species, as well as for the distinction of genera and families. Such examples have long made me feel that we should be very cautious in considering specimens which are similar in the form of the shell and general appearance of the animal, as the same species, when they come from different localities and are said to have different habits, unless we have examined the teeth and other characteristic parts; and such facts as the above must always render the identification of fossil shells with recent species very problematical.

Note on the Anatomy of Cyclostoma elegans. By E. CLAPARÈDE.

The most remarkable peculiarity presented in the anatomy of *Cyclostoma elegans* is the presence of an organ, of a brilliant white colour, lodged among the convolutions of the intestine. This organ, which has no analogue in any other known mollusk, contains a multitude of solid concretions, of concentric structure, composed of an organic skeleton and incrusting salts. The salts consist in part of carbonate of lime, partly of a salt not chemically determined, soluble in hydrochloric acid. This salt is not an oxalate; for it is also soluble, after a time, in acetic acid. An analogous gland exists in the *Cyclostoma costulatum* of the Banat. The author ascertained that the stiff silky hairs which are found on the skin of the freshwater Neritina exist in most of our freshwater Mollusca (*Lymnæa*, *Planorbis*, *Bithynia*).—Müller's *Archiv*, 1858, i. p. 1.